



TO: Commissioner Leonard Hamm  
Baltimore City Police Department

FROM: Chief William Goodwin  
Baltimore City Fire Department

Commissioner Dr. Joshua M. Sharfstein  
Baltimore City Health Department

RE: EMS and Hospital Gunshot Data

DATE: February 22, 2006

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You recently asked us to identify data from outside of the Baltimore City Police Department on gunshot-related injuries from 1999-2005.

This memo presents data from several external sources:

1. **Computer Aided Dispatch System.** This is the 911 call database to Emergency Medical Services (EMS).
2. **University of Maryland Shock Trauma and Johns Hopkins Hospital.** These hospitals are the two largest trauma centers in Baltimore City.

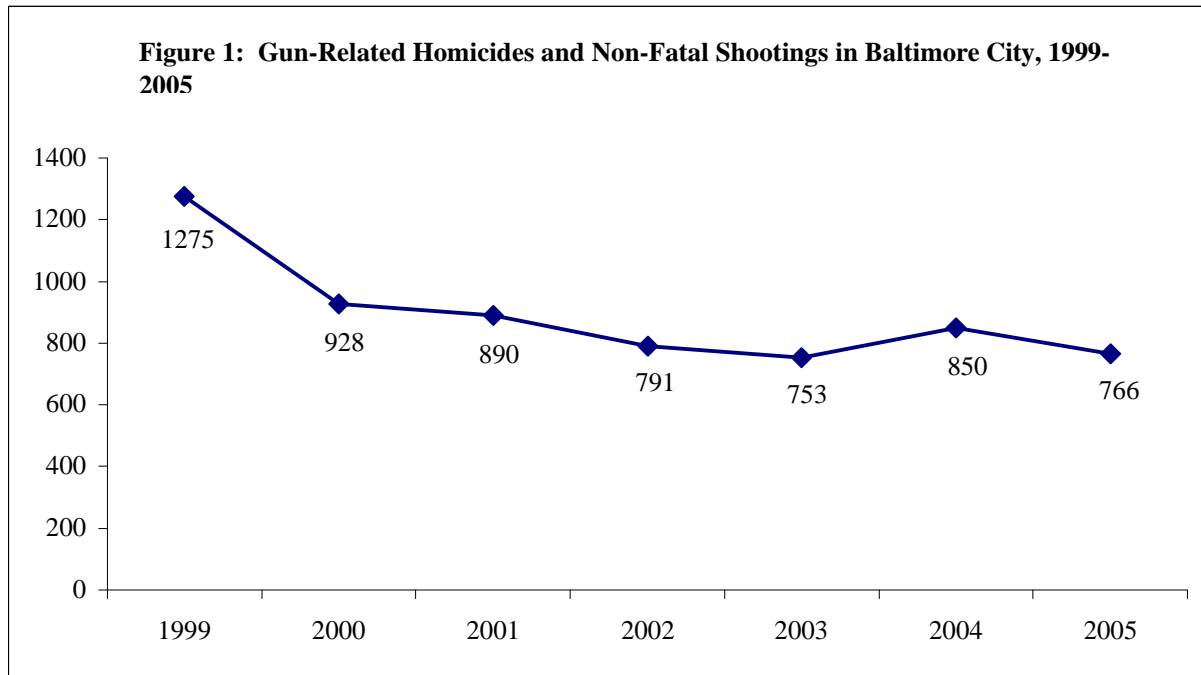
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## BACKGROUND

The Police Department has found that gun-related homicides and non-fatal shootings decreased 39.9% from 1999 to 2005 (Figure 1).



In recent weeks, questions have been raised about the validity of crime statistics in Baltimore City. In particular, some have speculated that the sizable drop in violent crime from 1999 to 2000 could have been an artifact of an audit of crime statistics for 1999, rather than a true reduction.

You asked us to identify data from outside the Baltimore City Police Department that could provide an independent perspective on the Department's data. Because gunshot violence is considered a reliable crime statistic, you asked us to provide outside data related to gunshot injuries from 1999 to 2005.

## SOURCES OF DATA

To respond to your request, we each sought the best available local data on gunshot injuries in Baltimore City.

### **Fire Department**

The Fire Department identified the **Computer Aided Dispatch** system, which is the computerized registry of all 911 calls to the EMS system.

A citizen calls 911 and reports that a victim has been shot. The call is routed to the Emergency Medical Dispatcher (EMD), who opens the Computer Aided Dispatch system and enters the code “M-SHOOT.” Multiple people may call about the same shooting and multiple units may respond to the same scene. However, if a victim is transported to the hospital, only one of the “M-SHOOT” calls is registered as a transport to the hospital. In cases where a victim is found dead at the scene, only one of the “M-SHOOT” calls is registered as a dead on arrival (DOA). As a result, a search for “M-SHOOT” calls that were transported to the hospital or DOA provides an unduplicated count of shooting-related incidents.

The Computer Aided Dispatch system has not changed since June 1998. This system is managed and operated by the Baltimore City Fire Department. After the transporting medic leaves the hospital, the call record is closed and cannot be altered by anyone.

The Computer Aided Dispatch system does not include all shootings, because not all shooting victims are taken by ambulance to hospitals. It also may not include victims who are not initially identified at dispatch as being shot or who are found at the same scene. Measurement is consistent from year to year, permitting a reliable assessment of trends.

### **Health Department**

The Health Department identified data collected by **University of Maryland Shock Trauma** and **the Johns Hopkins Hospital**, the two leading trauma centers in the city.

Each trauma center codes each case seen by the trauma team. Coding for gunshot injuries has been done consistently for many years. This process is the responsibility of and managed by the hospitals.

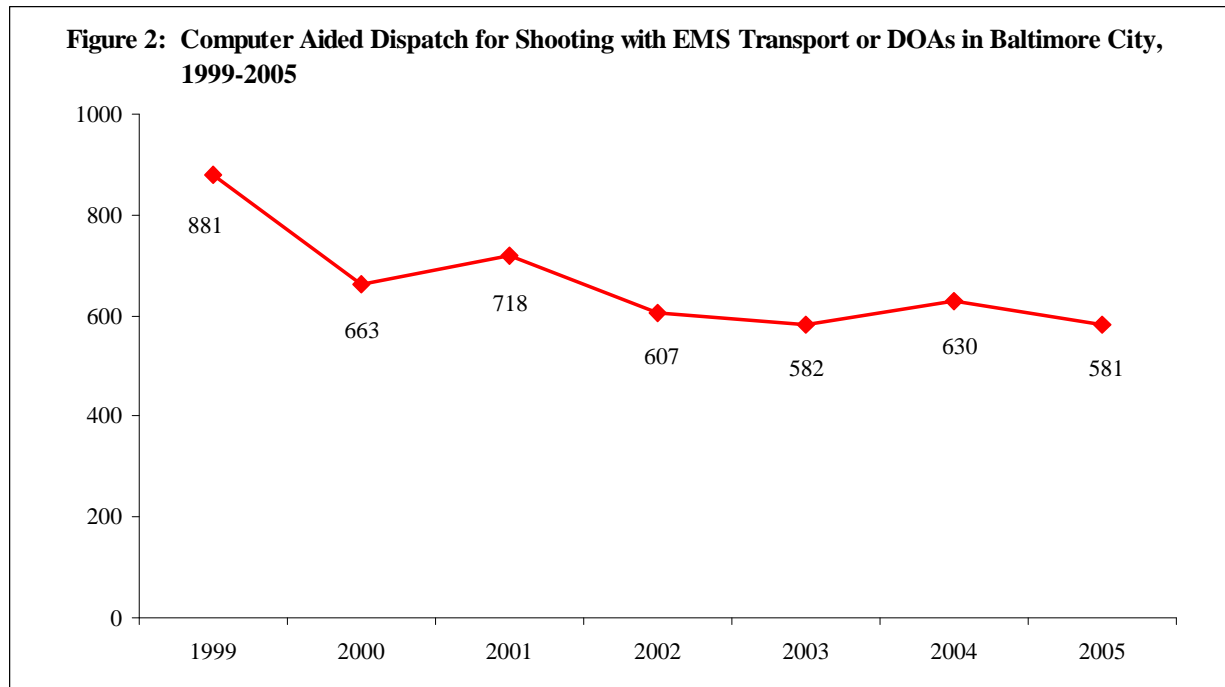
Data from these two centers will not include all shootings, because not all shootings are handled by these two hospitals. Measurement is consistent from year to year, permitting a reliable assessment of trends.

## RESULTS

### Fire Department

The Fire Department analyzed the **Computer Aided Dispatch** system for gunshot-related calls to EMS that resulted in transport or DOAs from 1999 to 2005.

This analysis found a 34.1% decline in gunshot-related calls that resulted in transport or DOAs from 1999 to 2005, including a 24.7% drop from 1999 to 2000 (Figure 2).

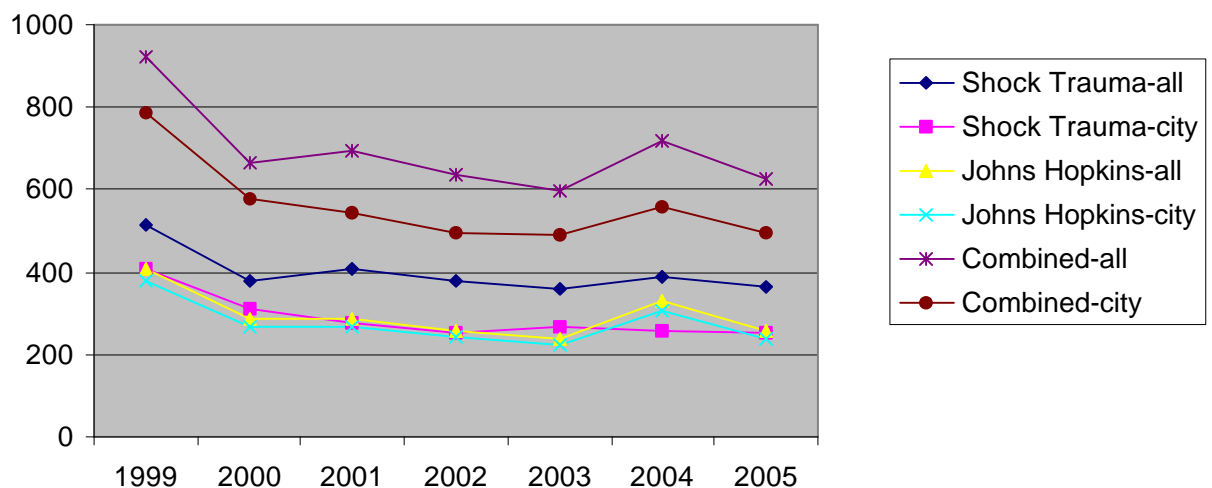


## Health Department

The Health Department obtained data on gunshot injuries from **University of Maryland Shock Trauma** and the **Johns Hopkins Hospital**.

The hospitals provided data both for all gunshot injuries and for gunshot injuries to Baltimore City residents. All gunshot injuries declined at the two hospitals by 32.2% from 1999 to 2005, including a 27.7% drop from 1999 to 2000. Gunshot injuries to Baltimore City residents declined by 37.4% from 1999 to 2005, including a 26.6% decline from 1999 to 2000 (Figure 3).

**Figure 3: Gunshot Injuries seen by UM Shock Trauma and Johns Hopkins Hospital, All Injuries and Injuries to Baltimore City Residents, 1999-2005**



## **CONCLUSION**

At your request, we identified data from outside the Baltimore Police Department on gunshot-related injuries. It would not be expected that these sources would mirror crime statistics exactly. Nonetheless, from 1999 to 2005, the trends are remarkably similar. The three sources of data contain a substantial drop from 1999 to 2000, with a slight bump in 2004 and continuing decline to 2005 (Figure 4).

Please do not hesitate to contact us if you have questions about this analysis.

**Figure 4: Comparison of Trends Between Police, EMS, and Hospital Data on Gunshot Injuries, Baltimore City, 1999-2005**

